

SKNa 26, SKRa 26



Stud Diode

Avalanche Diode

SKNa 26
SKRa 26

Features

- Avalanche type reverse characteristic up to 2000 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M6 (also 10-32 UNF 2A and M5)¹⁾
- Cooling via metal plates or heat sinks
- **SKN**: anode to stud
- **SKR**: cathode to stud

Typical Applications*

- DC power supplies for magnets or solenoids (brakes, valves, etc.)
- Field coil supply for DC motors
- Series connections for high voltage applications (dust precipitators)

1) M6x1 is standard; "UNF" should be added in description for 10-32 UNF 2A thread, or "M5" should be added in description for M5x0,8 thread.

2) Mounting with grease-like thermal compound or joint contact compound

| $V_{(BR)min}$ | $I_{FRMS} = 40\text{ A}$ (maximum value for continuous operation) $I_{FAV} = 26\text{ A}$ (sin. 180; $T_c = 69\text{ °C}$) | | C_{max} | R_{min} |
|---------------|---|------------|---------------|-----------|
| V | | | μF | Ω |
| 1300 | SKNa 26/13 | SKRa 26/13 | | |
| 1700 | SKNa 26/17 | SKRa 26/17 | | |
| 1800 | SKNa 26/18 | SKRa 26/18 | | |
| 2000 | SKNa 26/20 | SKRa 26/20 | | |

| Symbol | Conditions | Values | Units |
|---------------|--|------------------------|--------------------------------------|
| I_{FAV} | sin. 180; $T_c = 86\text{ (101) °C}$ | 22 (18) | A |
| I_D | K 9; $T_a = 45\text{ °C}$; B2 / B6 K 3; $T_a = 45\text{ °C}$; B2 / B6 | 17 / 24 30 / 42 | A A |
| I_{FSM} | $T_{vj} = 25\text{ °C}$; 10 ms $T_{vj} = 150\text{ °C}$; 10 ms | 375 320 | A A |
| i^2t | $T_{vj} = 25\text{ °C}$; 8,3...10 ms $T_{vj} = 150\text{ °C}$; 8,3...10 ms | 700 510 | A ² s A ² s |
| V_F | $T_{vj} = 25\text{ °C}$; $I_F = 60\text{ A}$ | max. 1,55 | V |
| $V_{(TO)}$ | $T_{vj} = 150\text{ °C}$ | max. 0,85 | V |
| r_T | $T_{vj} = 150\text{ °C}$ | max. 11 | m Ω |
| I_R | $T_{vj} = 25\text{ °C}$; $V_R = V_{(BR)min}$ | max. 10 | μA |
| P_{RSM} | $T_{vj} = 150\text{ °C}$; $t_p = 10\text{ }\mu\text{s}$ | 6 | kW |
| $R_{th(j-c)}$ | | 2 | K/W |
| $R_{th(c-s)}$ | | 1 | K/W |
| T_{vj} | | -40...+150 | °C |
| T_{stg} | | -55...+180 | °C |
| V_{isol} | | - | V~ |
| M_s | M6 M6 (lubricated) ²⁾ M5 or or 10-32 UNF 2A M5 or or 10-32 UNF 2A (lubricated) ²⁾ | 2 1,5 1,5 1,1 | Nm Nm Nm Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 7 | g |
| Case | | E 8 | |



SKN



SKR

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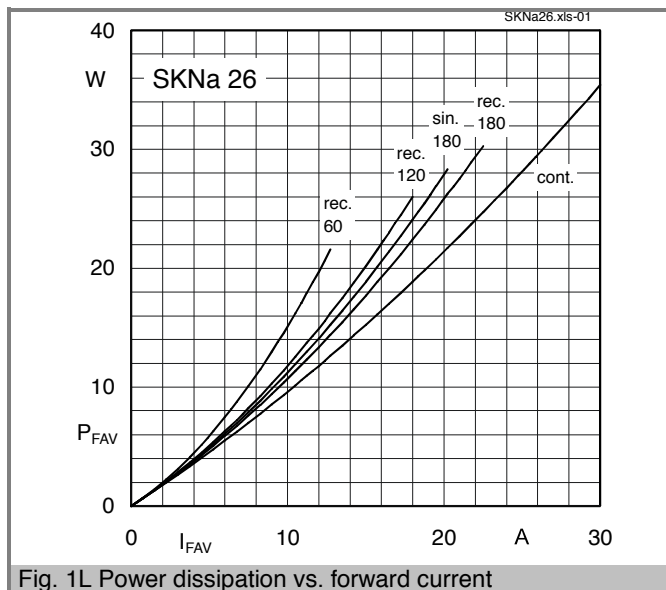


Fig. 1L Power dissipation vs. forward current

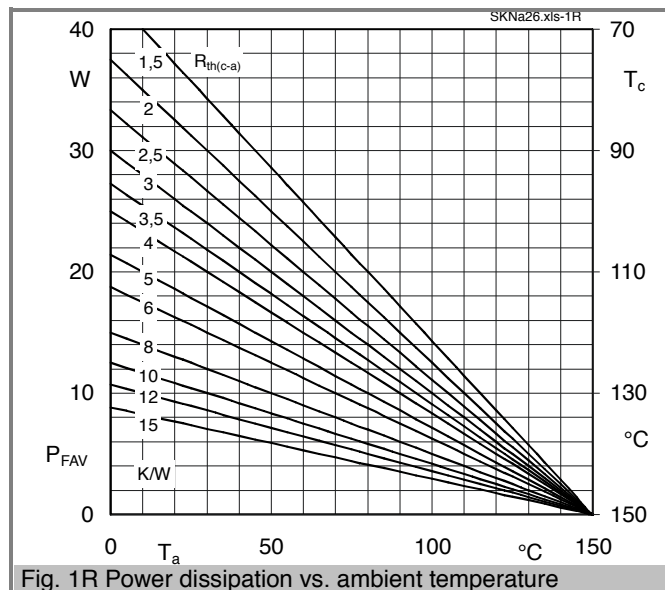


Fig. 1R Power dissipation vs. ambient temperature

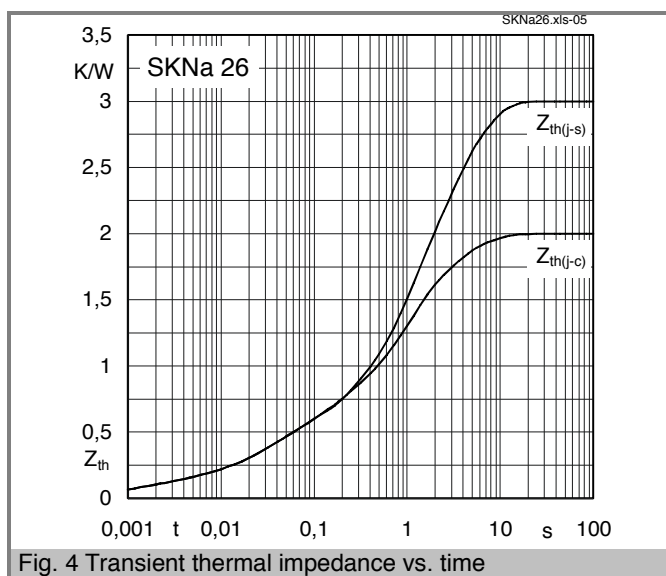


Fig. 4 Transient thermal impedance vs. time

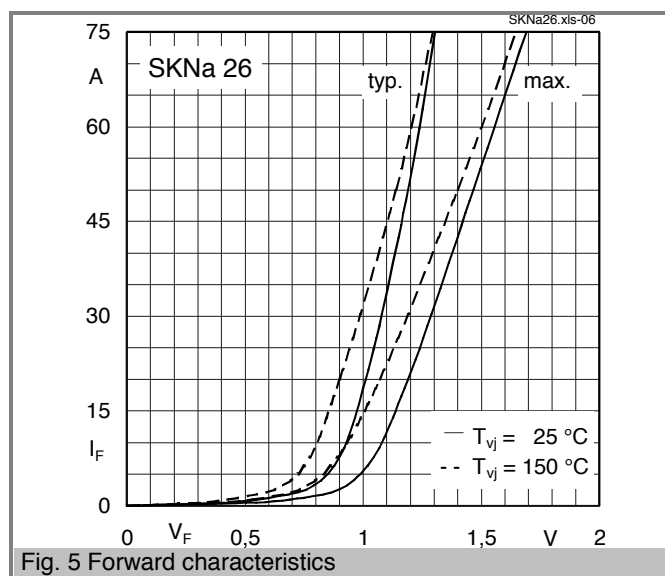


Fig. 5 Forward characteristics

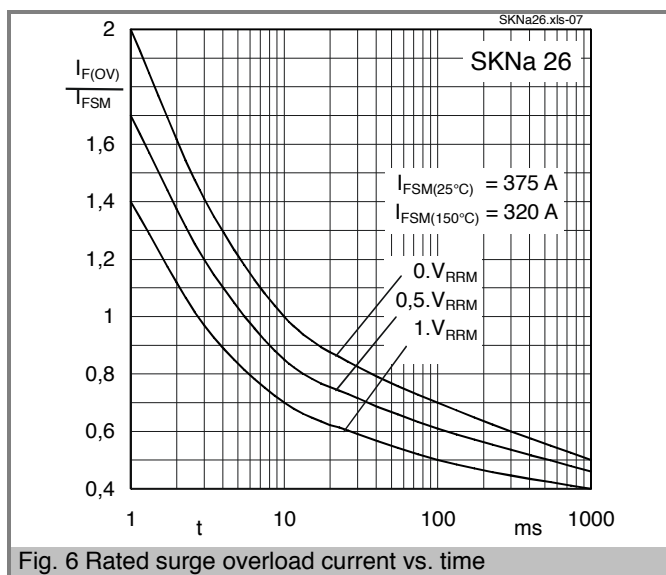


Fig. 6 Rated surge overload current vs. time

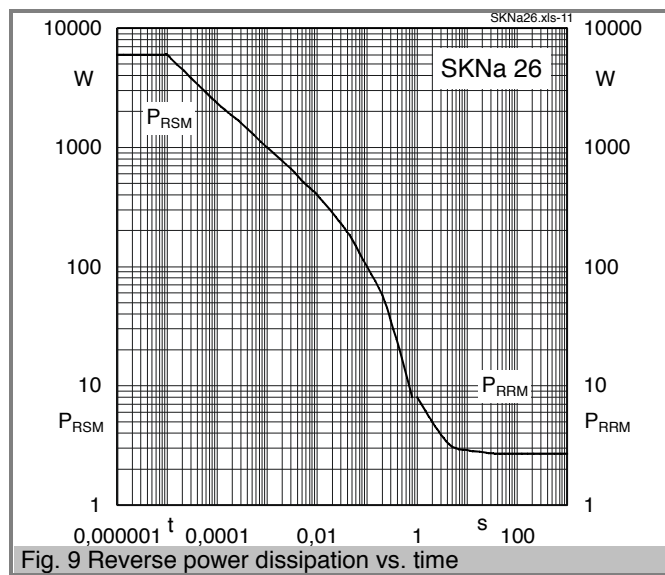
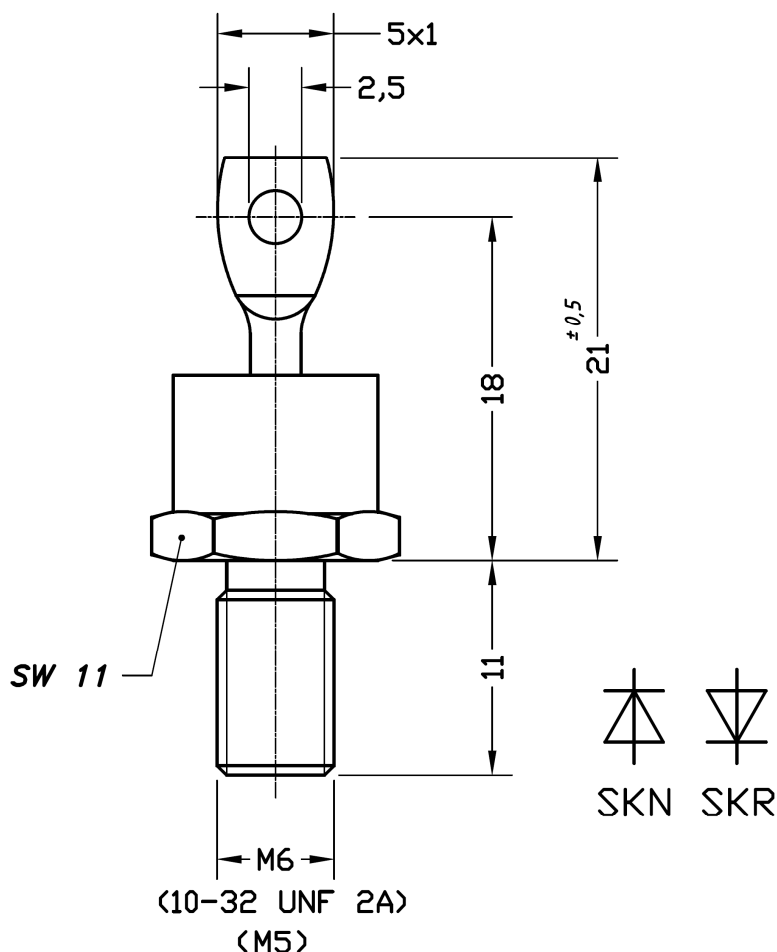


Fig. 9 Reverse power dissipation vs. time



Case E 8 (IEC 60191: A 4 M modified, A 3 U; JEDEC: DO-203 AA)

*IMPORTANT INFORMATION AND WARNINGS

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